CLAIMS

1. Use of a compound capable of modulating the activity of calpain for the preparation of a pharmaceutical composition for the treatment of cancer.

2. Use according to claim 1, characterized in that the compound is a protein or a polypeptide which is an inhibitor of the activity of calpain, or a nucleic acid sequence encoding such a polypeptide or protein.

3. Use according to claim 2, characterized in that the compound is a protein or a polypeptide which is a specific inhibitor of the activity of calpain on the wild-type p53 protein, or a nucleic acid sequence encoding such a polypeptide or protein.

4. Use according to claim 2 or 3, characterized in that the nucleic acid is part of a vector.

5. Use according to claim 4, characterized in that the nucleic acid is part of a viral vector, chosen from adenoviruses, retroviruses and adeno-associated viruses.

6. Use according to claim 4, characterized in that the nucleic acid is part of a lipid liposomal vector.

7. Use according to one of the preceding claims, characterized in that the compound is a nucleic acid encoding all or part of calpastatin.

8. Use according to claim 7, characterized in that the nucleic acid comprises all or part of the sequence SEQ ID No. 1 or a derivative thereof.

9. Use according to claim 8, characterized in that the nucleic acid is chosen from the sequences SEQ ID No. 1 and 2.

10. Use according to claim 8, characterized in that the nucleic acid is chosen from the derivatives of the sequences SEQ ID No. 1 or 2 encoding specific inhibitors of the degradation of the wild-type p53 protein.

11. Use according to one of claims 1 to 6, characterized in that the compound is a derivative of calpain capable of specifically degrading the mutated p53 proteins.

12. Viral vector comprising a nucleic acid sequence encoding a protein or a polypeptide which is an inhibitor of the activity of calpain.

13. Vector according to claim 12, characterized in that it is chosen from the adenoviruses, retroviruses and adeno-associated viruses.

14. Vector according to either of claims 12 or 13, characterized in that it comprises a sequence encoding all or part of calpastatin.

15. Vector according to claim 12, characterized in that it comprises a sequence encoding a derivative of calpain capable of specifically

degrading the mutated p53 proteins.

16. Pharmaceutical composition comprising a nucleic acid sequence encoding all or part of calpastatin or a derivative of calpain capable of specifically degrading the mutated p53 proteins.

17. Composition according to claim 16, formulated for inttra-tumour administration.

Add A'

add B1